

PLANT BIOTECHNOLOGY: GREEN FOR GOOD V.

10 - 13 JUNE, 2019
OLOMOUC, CZECH REPUBLIC



EXTENDED PROGRAMME

Monday, 10th of June 2019

12:00 – 20:00 *Registration*

13:00 – 15:30 Meeting Scientific Board

Opening session

16:00 – 16:30 Welcome speech by organizers

16:30 – 17:15 Opening Lecture: From genome to pan-genome in barley and wheat.
Nils Stein (IPK Gatersleben, Germany)

17:15 – 18:00 Plenary Lecture: Morphogenetic regulatory networks.
Miltos Tsiantis (Max Planck Institute Cologne, Germany)

18:00 – 21:00 *Welcome Party*

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Tuesday, 11th of June 2019

8:30 – 12:30 *Registration*

Crop biotechnology

Chair: I. Dodd

09:00 – 09:40 Keynote lecture: Drought adaptation and flowering time control in barley.

Maria von Korff Schmising (Max Planck Institute, Cologne, Germany)

09:40 – 10:00 Domestication delayed circadian rhythms in tomato.

José Jiménez-Gómez (INRA Versailles, France)

10:00 – 10:20 Using site-directed mutagenesis to manipulate beer quality and other cereal traits.

Goetz Hensel (Leibniz Institute of Plant Genetics and Crop Plant Research)

10:20 – 10:40 Targeting gibberellin signalling for improved plant architecture and stress tolerance in wheat.

Peter Hedden (Laboratory of Growth Regulators, Czech Academy of Sciences, Institute of Experimental Botany & Palacký University)

10:40 – 11:00 *Coffee Break*

Plant-microorganism interactions I

Chair: S. Wendeborn

11:00 – 11:40 Keynote lecture: Arbuscular mycorrhiza development and function.

Caroline Gutjahr (Technical University of Munich, Germany)

11:40 – 12:00 Advanced light-sheet fluorescence microscopy of plant development and plant-microbe interactions in *Medicago sativa*.

Miroslav Ovečka (Palacký University Olomouc, Czech Republic)

12:00 – 12:20 Follow-up of the degradation of thiametoxam and its metabolite clothianidin in open field cultivated industrial tomatoes: influence of mycorrhizal inoculation.

Kamirán Hamow (Hungarian Academy of Sciences, Centre for Agricultural Research, Hungary)

12:20 – 12:40 The efficacy of plant hormone containing product GreenCytokinin in field experiments.

Simona Larsson (Razosanas Tehnologijas, Latvia)

12:40 – 14:00 *Lunch*

Plant genetics and genomics

Chair: G. Hensel

- 14:00 – 14:30 Keynote lecture: Plant epigenetics, plant - plant environmental interactions.
Claude Becker (Gregor Mendel Institute, Vienna, Austria)
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- 14:30 – 15:00 Genome stability in maize.
Lieven de Veylder (VIB Ghent, Belgium)
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- 15:00 – 15:20 SMC5/6 complex maintains normal ploidy levels of male gametes during generative development in Arabidopsis.
Ales Pečinka (Institute of Experimental Botany CAS, Czech Republic)
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- 15:20 – 15:40 MicroRNA-regulated stress responses in banana.
Jennifer Ann Harikrishna (University of Malaya, Malaysia)
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- 15:40 – 16:10 *Coffee Break*

Plant-microorganism interactions II

Chair: E. Balázs

- 16:10 – 16:30 Volatile compounds other than CO₂ emitted by different microorganisms promote distinct post-transcriptionally regulated responses in plants.
Javier Pozueta-Romero (National Spanish Research Council, Spain)
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- 16:30 – 16:50 Selection and bioactivity of microalgae for agricultural purposes - concept and biological aspects of the SABANA project.
Vince Ördög (Széchenyi István University, Hungary)
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- 17:00 – 19:00 **Poster Session**
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Wednesday, 12th of June 2019

Molecular farming and genetic engineering

Chair: I. Frébort

- 09:00 – 09:40 Cereal genetic engineering.
Eva Stöger (BOKU, Vienna, Austria)
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- 09:40 – 10:00 GWAS: Fast-Forwarding Gene Identification and Characterization in Temperate Cereals.
Ahmad Alqudah (IPK, Germany)
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- 10:00 – 10:20 Study of cytokinin-mediated tolerance under water stress using a novel image method based on the canopy height of barley populations.
C. F Marchetti (Palacký University, Czech Republic)
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- 10:20 – 10:40 Kinetics of nuclear ploidy changes in developing grains of barley.
Anna Nowicka (Institute of Experimental Botany CAS, Czech Republic)
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- 10:40 – 11:00 *Coffee Break*

Improvement of food and feed

Chair: A. Pečinka

- 11:00 – 11:40 Keynote lecture: Plant genome editing.
Sungwa Choe (Seoul National University, South Korea)
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- 11:40 – 12:00 Metabolomics and MALDI MS Imaging (MSI) of metabolites in barley seeds during malting.
Karsten Niehaus (Universität Bielefeld, Germany)
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- 12:00 – 12:20 Highly effective inhibitors of cytokinin oxidase/dehydrogenase.
Jaroslav Nisler (Palacký University, Czech Republic)
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- 12:20 – 12:40 Effects of elicitors on Ginsenoside production in hairy root culture of *Panax vietnamensis* Ha et Grushv.
Loan Ha Thi (Biotechnology Center of Ho Chi Minh city, Vietnam)
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- 12:40 – 14:00 *Lunch*
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Publication and grant workshop

Chair: M. Holecová

14:00 – 14:20	How to be sure your paper will be rejected. Jeff Cole (University of Birmingham, UK)
14:20 – 14:40	Publish or perish OR... Publish & perish (ethics in scientific publishing). Lynn Sherrer (Elsevier, USA)
14:40 – 15:00	ERC grant selection process experience. Michal Otyepka (RCPTM Olomouc, Czech Republic)
15:00 – 15:20	<i>Title to be announced</i> Nada Koničková (Technology Centre, Czech Academy of Sciences, Czech Republic)
15:20 – 15:40	<i>Coffee Break</i>
15:40 – 17:00	Poster Session
19:00 – 22:00	<i>Networking event</i>

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Thursday, 13th of June 2019

Sustainable environmental technologies

Chair: M. Otyepka

- 09:00 – 09:40 Keynote lecture: Carbonaceous waste: sustainable applications in chemical transformations and environmental remediation.
Rajender S. Varma (U.S. Environmental Protection Agency, USA)
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- 09:40 – 10:10 Iron-based (nano)materials: an advanced tool for water treatment.
Jan Filip (Palacký University, Czech Republic)
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- 10:10 – 10:20 Natural plant biostimulants for invigorating pollen growth.
Johannes Van Staden (University of KwaZulu-Natal, South Africa)
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- 10:20 – 10:50 *Coffee Break*

Plant environmental interactions

Chair: J. Šamaj

- 10:50 – 11:30 Keynote lecture: Using rhizobia to reduce N₂O emissions.
Asa Frostegard (Norwegian University of Life Sciences, Ås, Norway)
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- 11:30 – 11:50 Size matters!? Influence of giant cells on ER body formation in *Arabidopsis thaliana*.
Alwine Wilkens (Jagiellonian University, Poland)
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- 11:50 – 12:10 NAI2 and TSA1 Paralogous Are Responsible for Differentiation Constitutive and Inducible ER Body Formation in Brassicaceae.
Jakub Bizan (Malopolska Centre of Biotechnology, Poland)

Closing session

- 12:10 – 12:50 Closing Plenary lecture: Microbial redox chemistry of nitrogen in soil by bacteria and archaea.
Kyle Lancaster (Cornel University, USA; supported by USDA)
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- 12:50 – 13:10 Closing remarks, poster awards
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- 13:10 Final adjournment
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